"glue" charge is not provided or defined in the SGAT, nor was it discussed in any prefiled testimony of a BellSouth witness. The "glue" charge, by definition, represents a charge that will be assessed when BellSouth performs the actual process of reconnecting UNEs for a requesting carrier. It is not clear from BellSouth witness Varner's testimony whether BellSouth will actually offer the service of combining UNEs for requesting carriers. BellSouth witness Scheye stated, however, that BellSouth will provide such service but that to do so would require negotiation, and that BellSouth would apply the 'glue' charge.

Upon consideration, we find that as of the hearing in this docket, the law on this matter was not settled. C.F.R. § 51.315 provided that:

> (a) An incumbent LEC shall provide unbundled network elements in a manner that allows requesting telecommunications carriers to combine such network elements in order to provide a telecommunications service.
>
> (b) Except upon request, an incumbent LEC shall not separate requested network elements that the incumbent LEC currently combines.

The 8th circuit court did not vacate these subsections of rule 51.315 in its decision on July 18, 1997. See Iowa Util. Bd. V. FCC, Nos. 96-3321, *et al.*, 1997 WL 403401, at 36 (8th Cir,. July 18, 1997. We note that there appeared to be a conflict between the court's decision and the FCC's rules. Since the hearing, however, the 8th Circuit has vacated these subsections. We find that since BellSouth does not meet the requirements of Section 271(c)(2)(B)(ii) for other reasons, we need not decide this issue today. We will be addressing the issues relative to combinations of UNEs in the near future in Docket No. 960833-TP. Our decision in that docket will give BellSouth guidance. We note that BellSouth should be prepared to address this issue when it re-files its Petition for interLATA authority.

b. UNE Summary

The intervenors argue that there are several problems with

the provisioning of UNEs. First, the intervenors assert that rates, both permanent and interim, set by this Commission do not meet the cost standard of the Act. The issue raised over permanent rates centers on geographically deaveraged rates for unbundled loops. As discussed above, the intervenors suggest that since the loop feeder portion of unbundled loops varies in length, so should the rate. The intervenors suggest that unbundled loops should have deaveraged rates, while maintaining uniform rates to end users. BellSouth maintains that this is a universal service issue and should be addressed in that forum. We do not necessarily oppose the notion of geographically deaveraged UNE rates. We have taken the position that the Act can be read to allow geographic deaveraging of unbundled elements; however, we did not interpret the Act to require geographic deaveraging. See Order No. PSC-96-1579-FOF-TP, in Docket No. 960833-TP. Therefore, we believe that the permanent rates we set in the BellSouth arbitration proceedings meet the cost based requirements of the Act.

The issue raised over interim rates is that they are not based on cost, and therefore, not compliant with the Act. We set interim rates in the BellSouth arbitration proceeding for those elements listed above because BellSouth did not provide cost studies for those elements. We adopted TSLRIC as the methodology for determining costs. The interim rates we set were not based on cost because they did not have a TSLRIC basis. Although we do not believe that interim rates are sufficient to meet the requirements of the Act, we note that we will be setting permanent rates for the UNEs for which BellSouth has interim rates in the near future. We would not reject BellSouth's application for interLATA authority simply because it contained a limited number of interim rates that would be replaced by permanent rates in the near future. The SGAT and interconnection agreements would of course need to be revised once permanent rates are established for those UNEs.

Only one carrier in the proceeding complained that BellSouth has not provided a specific UNE that it requested. As discussed above, ICI requested unbundled loops in order to provide Frame Relay Service. We are concerned that ICI requested such loops over 14 months ago, and still has not received access to such loops. Even if the ICI/BellSouth interconnection agreement did

not contain a provision for such elements, there is no reason for such a delay.

The intervenors argued that BellSouth does not have the capability to render electronic, or mechanized billing statements for usage sensitive UNEs such as local switching and local transport. As shown above, BellSouth witnesses Scheye and Milner acknowledged during cross examination that BellSouth did not have the capability to do so at this time. During the hearing, staff requested a late filed exhibit from BellSouth witness Scheye to answer what billing system was used to produce the AT&T billing statements, and whether or not BellSouth could currently provide mechanized billing for all UNEs. The answer to the mechanized billing question on Late Filed Exhibit 31 was that BellSouth could provide mechanized billing as of August 14, 1997. BellSouth, however, provided no evidence to support this claim. Without actual billing statements to demonstrate this capability, we believe that it is impossible to conclude that BellSouth has the capability to generate mechanized billing statements for usage sensitive UNEs. In addition, we ordered BellSouth to develop CABS formatted bills in the AT&T and MCI arbitration proceeding. See Order No. PSC-96-1579-FOF-TP. BellSouth has not demonstrated that it has the ability to generate CABS formatted billing statements. BellSouth clearly is still having to generate CLUB formatted bills as demonstrated by the AT&T bills. In conclusion, BellSouth provides mechanized billing for itself; therefore, we believe that BellSouth must provide such billing capability to ALECs.

BellSouth has not provided access usage detail to ALECs. As explained above, the local switch has the capability to record all access minutes that transit the switch. BellSouth currently records such access minutes in order for it to bill access charges for IXCs. BellSouth witness Scheye testified that BellSouth has the capability, and will provide such usage detail if requested. AT&T is one intervenor that has specifically requested such access usage detail, but has not received it. We note that AT&T has filed a motion with this Commission to compel BellSouth to provide the requested billing detail. In addition, although providing such information for its own purposes, BellSouth has not demonstrated that it has, or that it can, provide access usage detail to requesting carriers. In

conclusion, BellSouth records access usage billing for itself; therefore, it must provide such billing detail information to requesting ALECs.

OSS Related Problems

The intervenors have raised several problems and concerns with the various interfaces and with access to OSS functions. These problems will be discussed within each of the five functions of OSS. Although the FCC defines pre-ordering and ordering as one function, there are different problems associated with each, as well as a series of problems that involve both functions together. The problems that are specific to the pre-ordering function will be addressed separately. Those problems that involve both pre-ordering and ordering functions will be addressed with the problems specific to the ordering function.

c. Pre-Ordering

Problem 1: LENS requires multiple address validations for the same fields in different screens.

The intervenors state that LENS requires the address to be validated three separate times. In the inquiry mode of LENS, the address must be validated to obtain telephone numbers, validated again to view available features and services, and again to view the installation calendar. BellSouth's RNS system does not require multiple address validations while accessing pre-ordering information. MCI witness Martinez states that the RNS system automatically assigns a number, once the address is validated. Witness Martinez explains that this number is "hard coded so that anything that they did from then on would bring for [SIC] the features and functions of that particular office." Because the number is "hard coded," RNS does not require multiple validations at each step, as does LENS.

Problem 2: No on-line customer credit checking capability and limited availability of customer service record information.

ALECs do not have access to customer payment history information when using LENS in the pre-ordering mode.

BellSouth's RNS system allows BellSouth representatives the option of accessing such credit information online through Equifax. BellSouth witness Calhoun stated that she was unsure if BellSouth's internal interface, DOE, had such credit checking capability.

LENS in the inquiry mode does not provide customer credit history and detailed billing information other than the billing name and address. BellSouth witness Calhoun stated that this information was not agreed to in negotiations with ALECs, and therefore, was not provided via LENS. We did, however, require BellSouth to provide such information to AT&T and MCI in the arbitration proceeding. BellSouth witness Calhoun stated during cross examination that access to this information will be added to the LENS system on October 8th of this year.

Problem 3: LENS requires human intervention

BellSouth has not demonstrated that LENS provides non-discriminatory access to pre-ordering functions as compared to those available with BellSouth's own RNS and DOE systems.

Human intervention occurs because the pre-ordering capability of LENS is not integrated with the EDI ordering interface. This is evidenced by the need for an ALEC service representative to manually record the pre-ordering information obtained in the LENS inquiry mode and then manually re-enter the information into the EDI order. BellSouth suggests in the LENS User Guide that the service representative print out each LENS screen as a method of recording the pre-ordering information. BellSouth's interfaces do not require this level of manual intervention. This problem, as it relates to integration of interfaces, is also discussed below in Problem 6, of the Ordering and Provisioning section.

BellSouth witness Calhoun states that it is not necessary for an ALEC service representative to manually re-enter data accessed from LENS into the ALEC's internal OSS. Witness Calhoun states that there are several methods that obviate the need to re-enter data. First, an ALEC service representative can "cut and paste" information from LENS, to any other computer application that supports the "cut and paste" function. Second,

an ALEC can use the Common Gateway Interface (CGI). Witness Calhoun explained that CGI is a specification that could negotiate the movement of data between LENS and an ALEC's OSS. In addition, Witness Calhoun stated that CGI is available to any interested ALEC.

According to AT&T witness Bradbury, the CGI is not available to any new entrant interested in pursuing this option, as stated by BellSouth witness Calhoun. Witness Bradbury provided a chronology of events that took place when AT&T sought the information necessary to implement CGI as BellSouth proposes. AT&T's inquiry revealed that CGI builds upon the LENS interface, and firm specifications cannot be provided until the LENS interface is finalized. According to a letter dated May 19, 1997 from a BellSouth project manager, LENS will require multiple and frequent changes and will not be stable for six to nine months.

Problem 4: BellSouth can reserve more telephone numbers than ALECs

MCI witness Martinez states that LENS only allows ALECs the ability to reserve or assign six telephone numbers per order. AT&T witness Bradbury agrees stating, in addition, that BellSouth can reserve up to 25 numbers through its own OSS. In total, an ALEC is permitted to reserve a total of 100 numbers, or five percent of the available numbers, per central office. Witness Bradbury states that numbers which are available when using LENS in the firm order mode are not available when using LENS in the inquiry mode. The inquiry mode of LENS is used to access pre-ordering information, when placing the actual order through EDI, PC-EDI, or by fax.

The record reveals that there are other problems associated with accessing telephone numbers. First, an ALEC must go to a separate telephone number assignment screen each time it accesses a telephone number for a new customer. In other words, when the address is validated in LENS, a phone number is not automatically assigned to the customer. BellSouth's RNS system on the other hand, only requires the BellSouth service representative to visit a separate screen if the customer rejects the phone number that is automatically assigned when the address is validated. Second, LENS does not provide a list of available NXXs to serve a

specific address. BellSouth service representatives, however, have access to these numbers when using either RNS or DOE.

Problem 5: Cumbersome and inefficient methods of locating long distance company, and product and service information selected by customer

LENS provides a randomly organized list of long distance companies. The list is provided randomly so that long distance companies beginning with the letter "A" do not have an advantage over other companies. The problem here is that LENS does not provide a method of accessing a particular company name easily. The ALEC service representative must scroll through the extensive list of over 300 available carriers to find the name and carrier code of the long distance company. BellSouth's RNS and DOE systems permit the BellSouth representative to access carrier information by typing the first few letters in the carrier's name. AT&T witness Bradbury states that this is clearly not at parity in terms of timeliness or quality. This same condition is true when an ALEC's representative is trying to locate a service using LENS. The ALEC's representative must scroll through the list of available services to see if the requested service is available in the end office that serves the customer. BellSouth's RNS and DOE systems permit the BellSouth representative to access product and service information by typing the first few letters of the service or feature's name.

Problem 6: LENS does not provide access to calculated due dates in the inquiry mode

ALEC service representatives do not have access to due dates in the same manner as BellSouth's representatives when they use LENS in the inquiry mode to access pre-ordering information. LENS provides the ALEC representative with a table of dates that are not available, instead of the earliest available dates for a particular central office. In contrast, RNS provides a color coded calendar which shows the first available due date calculated by DSAP, and highlighted in green. All other dates, both available and unavailable, are distinguished by other colors.

d. Pre-Ordering Summary

As discussed above, the intervenors argue that there are several problems with the LENS pre-ordering interface. The problems raised demonstrate that LENS does not provide access to pre-ordering information in essentially the same time and manner as BellSouth's RNS and DOE systems. First, LENS requires multiple validations of the address to access certain functions. BellSouth's RNS and DOE systems do not require multiple validations. Therefore, the ALEC service representative will spend more time reviewing or accessing pre-ordering information than will a BellSouth service representative.

LENS does not provide customer credit checking capability and it only provides limited customer service record information. On the other hand, BellSouth's internal interface, RNS, provides on-line credit checking capability and access to the customer's full service record information.

LENS is a human-to-machine interface. Therefore, after an ALEC service representative accesses pre-ordering information, the representative must either cut and paste the information, or print out each LENS screen and then retype the information into an EDI order. This is true also when entering information into the ALEC's internal OSS. RNS and DOE do not require any such manual handling of data, since both systems have ordering and pre-ordering functions that are integrated.

An ALEC cannot reserve the same number of phone numbers through LENS as BellSouth can in RNS. In addition, RNS automatically assigns a phone number when an order is being taken for a new customer. LENS requires the ALEC service representative to access the number screen and select a number. Unlike RNS and DOE, LENS does not provide a list of available NXXs for a specific address.

When searching for the long distance carrier requested by the end user, the BellSouth service representative can type the first few letters in the carrier name and both RNS and DOE will automatically bring up the carriers full name and identification code. This feature is also available when the BellSouth service representative is searching for products and services. LENS,

however, does not offer this capability. In LENS, any searches performed by the service representative must be performed by scrolling page by page until the carrier name or service name is found. This clearly is not at parity with BellSouth.

LENS does not provide access to calculated due dates. Instead, a table of dates appears showing all days that are unavailable for due dates. These unavailable dates include weekends, holidays, scheduled office down times, and days that are already filled with other service orders. The ALEC representative, however, has to look at a calendar to figure out the next available due date. In contrast, RNS offers a BellSouth representative a calendar that highlights, in a specific color, the earliest due date available. In addition, the calendar shows the dates that are not available in another color. In other words, the BellSouth ordering interface has a color coded calendar that is user friendly and is efficient. BellSouth has not offered an efficient due date recognition system for LENS users.

Upon consideration, we do not believe that BellSouth is providing pre-ordering capabilities at parity with the pre-ordering capabilities it provides itself. In addition, we note the FCC has concluded that "in order to meet the nondiscriminatory standard of OSS, an incumbent LEC must provide competing carriers access to OSS functions for pre-ordering...that is equivalent to what it provides itself, its customers or other carriers." As explained below in the ordering and provisioning summary, we believe BellSouth must provide a pre-ordering interface that is integrated with the EDI ordering interface, and that it must correct the LENS pre-ordering deficiencies discussed above.

e. Ordering and Provisioning

Problem 1: LENS and EDI do not have electronic edit capability at parity with BellSouth's RNS and DOE systems.

BellSouth witness Calhoun acknowledged that RNS and DOE have greater edit checking capabilities than either EDI or LENS. This means there is a greater likelihood that an ALEC order will be

rejected by the downstream systems than will a BellSouth order. Witness Calhoun testified that RNS, DOE and EDI distinguish the fields that must be populated so the customer service representative knows that the order is complete. Although EDI distinguishes the fields that must be populated, we note that witness Calhoun testified that LENS does not distinguish which fields must be populated. In addition, witness Bradbury testified that the FUEL and SOLAR databases work simultaneously with RNS, while a BellSouth customer service representative is working on an order. Therefore, FUEL and SOLAR are checking the order as it is being processed. This online edit checking capability does not exist with LENS or EDI, because LEO and LESOG are downstream databases that check the ALEC's order after it has been sent. Once the order is rejected downline, the ALEC is notified either by fax or through a phone call by the LCSC. This notice could take days. Errors in BellSouth submitted orders, not caught by the on-line edit checks, but caught by the downstream checking database, however, are sent to an error handling group, typically within 30 minutes.

Problem 2: No order summary screen exists in either EDI or LENS as in RNS.

When an ALEC representative completes taking the order from a customer, there is no order summary screen in LENS or EDI to confirm the order while the customer is on line, before sending the order off for completion. BellSouth witness Calhoun acknowledged during cross examination that RNS provides an order summary screen so that the order may be confirmed with the customer.

Problem 3: ALECs cannot access or make changes to pending orders.

Once an order is placed through LENS or EDI, the ALEC service representative cannot access the original order to make a change. EDI allows a change order to be made and submitted to BellSouth; however, the original order cannot be accessed in order to make modifications directly. In contrast, the original order placed by a BellSouth representative using RNS and DOE can be changed by accessing an order update screen.

Problem 4: BellSouth has not provided requesting carriers with the technical specifications of the interfaces.

BellSouth states that if an ALEC wants to integrate its pre-ordering information from LENS with its EDI ordering system, then the ALEC needs to use a Common Gateway Interface (CGI) program to build its side of the interface. Witness Calhoun testified that CGI is a program that manipulates data between two systems, thus eliminating the need for an ALEC customer service representative to move from one system to another. BellSouth began the development of CGI technical specifications for the ALECs, but abandoned the effort, stating that it appeared no party wanted to pursue that option. AT&T and MCI, however, state that they have both requested, and not received, the technical specifications from BellSouth. Further, witness Calhoun stated that an ALEC cannot complete development of a commercial system that integrates LENS and EDI until BellSouth completes the CGI technical specifications on its side of the interface. Witness Calhoun also stated that BellSouth is willing to continue to develop the CGI specifications with any interested ALEC.

AT&T witness Bradbury argue that an ALEC will be at a disadvantage until BellSouth develops its side of the interface. Witnesses Calhoun and Bradbury testified that RNS displays the rate for a service and calculates the taxes for that service. She stated that when a BellSouth customer service representative validates a customer's address, a tax code is returned that provides the appropriate taxes for that address. This information then flows through the order to the billing system. She also testified that in the products and services section of RNS, an option button appears beside each product or service which allows the BellSouth customer service representative to offer promotions to BellSouth's end users. Witness Calhoun, however, stated that pricing, promotion, and packaging of services that an ALEC offers to its customers is at the ALEC's discretion. She also stated that an ALEC can choose, "to organize information on its side of the interface in whatever way suits its pricing or marketing objectives."

The Intervenors also state that BellSouth has not notified them of, or provided them with, the modifications BellSouth makes

to LENS. The parties state that this is essential because LENS is a proprietary system that BellSouth owns and controls. According to witness Bradbury, BellSouth makes changes to LENS unilaterally, which can make this interface unstable, disruptive, inefficient and expensive for new entrants to use. In addition, witness Martinez testified that since March BellSouth has made three revisions to the LENS Users Guide, none of which were disclosed to MCI. Witness Martinez testified further that, in all cases, MCI learned of these revisions from a source other than BellSouth.

Witness Calhoun testified that the latest version of the LENS User Guide was dated June 17, 1997, and that some changes to LENS have taken place since then. She testified that the next update to LENS is scheduled for October 8, 1997. She further testified that no specific method was used other than through LENS itself to communicate the subsequent LENS modifications to ALECs since June 17th.

Problem 5: Interfaces are not fully electronic or integrated, and require manual intervention

There are three forms of manual intervention problems that are raised by the intervenors. The first form occurs because BellSouth's proposed interfaces do not link an ALEC's OSS with BellSouth's OSS. The second occurs because BellSouth has not provided an interface that integrates pre-ordering and ordering capabilities together, as do its own internal interfaces. The third occurs because LENS and EDI do not enable an ALEC to place orders for the same services as BellSouth, which flow through BellSouth's downstream systems without by human intervention.

AT&T witness Bradbury states that LENS is a human-to-machine interface, since there is no electronic communication between BellSouth's OSS and the ALEC's OSS. This is evidenced by the need for an ALEC service representative to manually enter data into BellSouth's OSS, and then manually re-enter the same data into the ALEC's OSS. BellSouth believes that it is up to the ALEC to develop the integration capability for the interfaces. As discussed above, however, BellSouth has not provided the technical specifications necessary for an ALEC to design such capability. In addition, witness Bradbury states that LENS

cannot process orders electronically for simple network elements. When an ALEC uses LENS to make an order for a UNE, it must type the request in the "remarks" section. According to Witness Bradbury, the "remarks" section is unformatted and requires manual processing by BellSouth.

AT&T witness Bradbury states that since the pre-ordering capability of LENS is not integrated with the ordering capability of EDI, the pre-ordering information must be manually entered into the EDI based order. This is in direct contrast to BellSouth's RNS and DOE systems which automatically populates pre-ordering information into the order. Thus, witness Bradbury concludes, the capabilities inherent in BellSouth's RNS and DOE systems are not provided at parity for ALECs.

Another form of manual intervention involves BellSouth's Local Carrier Service Center (LCSC). The EDI and LENS ordering interfaces do not allow all orders to flow through BellSouth's downstream systems to generate a mechanized order. BellSouth witness Calhoun states that mechanized orders for PBX trunks, multi-line hunt groups, Synchronet services, and basic rate ISDN service can not be generated at this time, when placed via EDI. Instead, orders for these services drop out of the system and go to the LCSC where the order is processed manually. The problem is that BellSouth's internal ordering systems, RNS and DOE, allow orders for these services to flow through the downstream systems to generate a mechanized order. Therefore, BellSouth has failed to provide services that it can order electronically to requesting carriers on an equivalent basis.

Problem 6: Sufficient Capacity to meet demand.

The intervenors argue that BellSouth does not have sufficient capacity to meet the demand for orders. They believe there are specific problems that support their claim.

The parties question the efficiency of BellSouth's Local Carrier Service Center (LCSC). BellSouth operates two LCSCs that interface with the ALECs for interconnection, UNEs, and resale

orders. Witness Scheye states that BellSouth does not use the LCSC for its retail operations. Instead, BellSouth has its own organizational group that performs analogous but different functions for BellSouth's retail customers. In addition, witness Scheye testified that the job performed by BellSouth's LCSC employees ultimately affects BellSouth's OSS where an order requires manual intervention.

On March 13, 1997, an independent consultant, hired by BellSouth, submitted its evaluation of BellSouth's LCSC operations in Atlanta, Georgia and Birmingham, Alabama. The consultant, Dewolff, Boberg & Associates, Inc., stated that the company's objective ultimately was to "reduce costs while improving manager, supervisor and employee effectiveness." ICI cited to several parts of the consultant's analysis, stating that the problems identified by the consultant were having a direct, negative impact on the ALECs. For example, the consultant concluded that excessive errors and reworks were lowering the quality of BellSouth's service due to missed dates and excessive lead times. The consultant further stated that this "level of ineffective utilization is a result of unclear expectations, employee skill deficiencies, the lack of process documentation and control over the work flow." The consultant linked these problems to BellSouth's supervisors who were described as "passive or reactionary," and who were not observed actively training employees.

After concluding the initial review of the LCSC's performance, the consultant and BellSouth conducted a 22-week study to improve the deficiencies noted in the March 13, 1997 evaluation. The study began on March 17, 1997, and was to conclude on August 15, 1997. On July 8, 1997, the consultant released the status report for the end of Phase II of the project. ICI questioned witness Scheye about several of the problems identified by the consultant. The consultants found that the percentage of Local Service Requests (LSRs) that needed clarification during the week of June 25, 1997, was 64.6%. In addition, the consultants stated that the average number of times that these LSRs were sent back to MCI and AT&T in order to complete the processing was 1.7 times. Witness Scheye stated that this meant 64.6 percent of all orders submitted by AT&T and MCI needed clarification. He further stated that on average, the

LCSC had to send these orders back to AT&T and MCI almost twice per order, before an error free LSR was received. Thus, witness Scheye concluded that BellSouth needed to provide some additional training or clarification to the carriers so that fewer orders are submitted in error. Witness Scheye also stated that BellSouth can provide ALECs with all of the training materials to provide BellSouth with accurate orders, but it is up to each ALEC to provide BellSouth with error free orders.

Despite the problems cited above, BellSouth believes that it has sufficient capacity to meet demand. BellSouth estimates that it would receive 5000 orders per day on a region wide basis, 4000 of which can be supported by EDI and 1000 supported by LENS. BellSouth expects Florida to account for 25% of the orders. In addition, witness Calhoun states that LENS was designed to handle pre-order activity in support of 5000 orders per day in the BellSouth region. Furthermore, witness Calhoun states that, "the combined peak daily ordering volume over the EDI and LENS interfaces has thus far been about 200 orders, which is significantly less than the current capacity of at least 5,000 orders per day." We note that there is no record evidence that documents how BellSouth derived its estimated pre-ordering and ordering capacity, nor is there any evidence estimating how many of the orders would be for resale and how many would be for UNEs.

In response to the parties claims, Witness Scheye agreed that there were problems revealed in the 22-week study. Witness Scheye testified, however, that all of the problems identified were fixed, with the exception of one. The one outstanding item deals with the continuous improvement of BellSouth's LCSC. The record does not, however, contain the final report by the consultants for the 22-week study.

Upon consideration, it appears that BellSouth has not met its burden to show that there is sufficient capacity. As noted above, there is no record evidence that documents how BellSouth derived its estimated pre-ordering and ordering capacity, nor is there any evidence estimating how many of the orders would be for resale and how many would be for UNEs.

Problem 7: Installation intervals not at parity with BellSouth

ICI states that it ordered and received a DS-1 loop from BellSouth; however, it took BellSouth six weeks to provide the loop. According to ICI witness Strow, BellSouth typically provisions a DS-1 loop for itself in 1-2 weeks.

Sprint/SMNI witness Closz states that BellSouth regularly misses its commitment to notify SMNI of any problems with a submitted order within 48 hours. Witness Closz asserts that this results in missed installation due dates. Also, SMNI has experienced problems with BellSouth converting customers to SMNI for service. Witness Closz states that a problem occurred after BellSouth issued an internal order to provide SMNI a local loop. The incorrect order by BellSouth twice resulted in an eighteen day installation interval.

47 C.F.R. § 51.319(c)1(ii), provides that:

> An incumbent LEC shall transfer a customer's local service to competing carriers within a time period no greater than the interval within which the incumbent LEC currently transfers end users between interexchange carriers, if such transfer requires only change in the incumbent LEC's software.

Witness Gillan states that BellSouth must create an OSS that allows it to move customers between itself and new entrants using network elements, in the same interval that BellSouth moves customers between IXCs, as long as no network reconfiguration is required.

FCCA witness Gillan states that BellSouth has admitted that it has not proposed a service interval for the loop/port combination. In addition, witness Gillan states that BellSouth does not provide the ordering capability for combinations of UNEs that are currently combined, because BellSouth's position is that it will break apart the preexisting combination of UNEs and require them to be put back together again. BellSouth witness Calhoun does not know if BellSouth's ordering system is capable of accepting and generating an order for a preexisting loop/port combination, where the elements would not have to be taken apart and put back together.

We note the concerns raised about provisioning intervals. We address BellSouth's target intervals in Part VI. of this Order. Further, we will not resolve the issue raised pertaining to loop/port combinations for the same reasons we stated in our discussion on combinations of UNEs earlier. As we stated there, since BellSouth does not meet the requirements of Section 271(c)(2)(B)(ii) for other reasons, we need not decide this issue today. We will be addressing the issues relative to combinations of UNEs in the near future in Docket No. 960833-TP. Our decision in that docket will give BellSouth guidance. We note that BellSouth should be prepared to address the intervenors concerns regarding loop/port combinations when it re-files its Petition for interLATA authority.

Problem 8: Insufficient testing and test documentation

BellSouth entered 86 binders of testing information into the record as support for its compliance with the 14 checklist items and the SGAT. The binders contain technical service descriptions, testing results, ordering procedures, provisioning procedures, maintenance procedures, and other information that BellSouth uses internally to respond to orders for UNEs and resold services by an ALEC. Witness Milner testified that the end-to-end testing results contained within the 86 binders were performed to verify BellSouth's ability to respond appropriately to an order, whether it was submitted manually or via LENS or EDI. Witness Milner, however, testified that the electronic ordering systems, LENS and EDI, were not included in "end-to-end" testing processes. Witness Milner stated that "the end-to-end testing was not a test of the ordering vehicle." Further, witness Milner stated that when BellSouth conducted its end-to-end testing, BellSouth entered the instructions for the test in BellSouth's direct order entry (DOE) system, rather than in LENS or EDI. Witness Milner also testified that a very large amount of duplication was resident within the binders. For example, witness Milner stated that some of the documents contained in the binders were duplicated as many as 50 times. In addition, numerous places within the binders refer to draft or temporary instructions which shows that BellSouth's methods and procedures are still evolving and changing.

The FCC stated in the Ameritech Order that it agrees with the DOJ on the standard for operational readiness, which is evidence of actual commercial usage. The FCC maintains that actual commercial usage is the most probative evidence of operational readiness. In addition, the FCC does not require an RBOC to ensure that ALECs are using all OSS functions available to them; however, the RBOC is charged with demonstrating that the reason an ALEC is not using a particular OSS function is strictly a business decision of the ALEC, rather than a lack of OSS function availability. The FCC states that it may consider other forms of evidence for commercial readiness if the RBOC can demonstrate why ALECs are not using all available OSS functions. The other forms of evidence that the FCC will consider, absent actual commercial usage are; carrier-to-carrier testing, independent third-party testing, and internal testing.

Upon consideration, we find that the internal testing results contained in the binders do not prove that BellSouth can actually provide the items. We note that the testing results were not verified by an independent third party. We believe that the manner in which BellSouth performed its internal testing is insufficient to demonstrate that its systems and processes are capable of responding to an order placed by an ALEC in a manner that is at parity with BellSouth's own abilities. We believe that end-to-end testing to demonstrate that ordering and provisioning of services must be done as if an ALEC were placing the order. BellSouth performed end-to-end testing by using its own systems to demonstrate that it can provide service. ALECs, however, not only use different interfaces, but they must also use different downstream databases to process orders. Accordingly, BellSouth has not demonstrated that ordering and provisioning functions placed through ALEC available systems do, in fact, work at parity with BellSouth's internal systems.

f. Ordering and Provisioning Summary

As discussed above, the intervenors argue that there are several problems with BellSouth's ordering interfaces. The problems raised by the intervenors demonstrate that BellSouth has

not provided nondiscriminatory access to the ordering and provisioning functions.

LENS and EDI do not incorporate the same level of on-line edit capabilities as BellSouth's internal interfaces. There is, therefore, a higher chance that orders will contain mistakes, which will be rejected by the downstream systems. The result of the limited edit capability is that ALEC orders will take longer to actually be provisioned then BellSouth orders.

Unlike RNS and DOE, LENS and EDI do not provide an order summary screen. This makes it very difficult and time consuming for an ALEC to verify a customer's order while the customer is on-line. We believe that LENS and EDI must provide this capability.

We also find that the interfaces offered by BellSouth must offer similar functionality. As stated above, pending orders placed via LENS or EDI cannot be accessed to make changes. Instead, a change order must be prepared. BellSouth's internal interfaces provide the service representative the ability to access orders pending implementation.

In order for ALECs to develop their side of the interface, they must first receive technical specifications for BellSouth's proposed interfaces. BellSouth has not provided such specifications to requesting carriers.

As discussed above, there are three forms of manual intervention. We believe each of these types of manual intervention must be eliminated before the nondiscriminatory access standard can be met. We find that to provide nondiscriminatory access to the ordering function, BellSouth must do the following: first, BellSouth must provide an interface that integrates the pre-ordering and ordering functions; second, BellSouth must provide ALECs with the same capability to generate electronic orders for the same services that BellSouth can electronically generate for itself; and third, BellSouth must provide the technical specifications necessary to permit ALECs to link their own OSS system to BellSouth's OSS. It is BellSouth's position that ALECs need to develop their own integration capabilities. BellSouth, however, has not provided sufficient

technical documentation for LENS that would enable ALECs to do so.

On the first and second points the FCC concluded that "in order to meet the nondiscriminatory standard of OSS, an incumbent LEC must provide to competing carriers access to OSS functions for pre-ordering, ordering, provisioning, maintenance and repair, and billing that is equivalent to what it provides itself, its customers or other carriers." Regarding the third point, the FCC stated that a BOC is required to provide carriers with the technical specifications that will allow ALECs to modify or design their systems so that their OSS will be able to communicate with the BOC's legacy systems. The FCC further stated that BOCs "must provide competing carriers with all of the information necessary to format and process their electronic requests so that these requests flow through the interfaces, the transmission links, and into the legacy systems as quickly and efficiently as possible."

BellSouth has not demonstrated that its systems can process the number of orders per day that it claims it can. The consulting firm hired by BellSouth to perform an analysis of the Local Carrier Service Center (LCSC), stated in its report that BellSouth has missed service implementation dates. In addition, BellSouth has experienced problems providing firm order confirmations (FOCs) in a timely manner. This results in the ALEC not knowing when service was actually implemented, and has resulted in billing statements being sent to the end user by both BellSouth and the ALEC. Although BellSouth claims that it is currently receiving approximately 200 orders per day, BellSouth has not demonstrated that it can effectively handle this low volume of orders in an accurate and timely fashion. Therefore, we do not believe that BellSouth can currently meet service order demand requirements.

BellSouth has not provided sufficient test documentation to prove that it is capable of providing those services not yet requested. We believe that the manner in which BellSouth performed its internal testing is insufficient to demonstrate that its systems and processes are capable of responding to an order placed by an ALEC in a manner that is at parity with BellSouth's own abilities.

BellSouth has not provided sufficient test documentation to prove that it is capable of providing those services not yet requested. We believe that the manner in which BellSouth performed its internal testing is insufficient to demonstrate that its systems and processes are capable of responding to an order placed by an ALEC in a manner that is at parity with BellSouth's own abilities.

g. Maintenance and Repair

Problem 1: TAFI is a proprietary system that does not provide ALECs with machine-to-machine functionality.

Witness Bradbury states that TAFI is a human-to-machine interface that requires a new entrant to manually enter each trouble report order into the ALEC's own OSS, because TAFI does not allow electronic communication between BellSouth's OSS and a new entrant's OSS. Therefore, AT&T states that because new entrants must manually input the maintenance and repair data twice, instead of only once, the ALECs are denied the ability to operate in substantially the same time and manner as BellSouth. BellSouth, however, has the capability to submit maintenance and repair orders electronically for all types of service.

Witness Calhoun agrees that TAFI is not a machine-to-machine interface. She contends that the TAFI interface is "intelligible to a human being" using this system. In addition, witness Calhoun states that TAFI is not an industry standard; however, she states that the functionality that TAFI provides is "far superior" to the level of functionality that the industry defines in terms of exchanging information about a trouble report. She also states that TAFI can be used for any trouble identified with a telephone number, including residential and simple business services, and some UNEs, such as an unbundled port, interim number portability, PBX trunks and ESSX station lines.

Problem 2: The TAFI interface lacks sufficient capacity to meet demand.

AT&T states that TAFI does not have the necessary capacity to meet the demand of all ALECs. In support of this claim, AT&T asserts that TAFI currently has the capacity to support 195 simultaneous users in BellSouth's region if its "hot spare" arrangement is activated. Witness Bradbury argues that this capacity is insufficient, because AT&T alone has several hundred repair attendants that would all need to be logged into TAFI at the same time, just as BellSouth's repair attendants are.

BellSouth argues that TAFI has sufficient capacity to meet demand. Witness Calhoun testified that TAFI currently supports 65 simultaneous users with a second processor being installed that will double the capacity. In addition, she stated that BellSouth has a "hot spare" arrangement in place that can be activated almost immediately. The "hot spare" arrangement protects against equipment failure in case one of the main processors fails, and it would increase the capacity by an additional 65 users for a total of 195 simultaneous users. Further, for every 65 users, the TAFI system can handle 1300 troubles per hour. Witness Calhoun also stated that additional processors can be added within 60 days to increase the capacity, if needed.

h. Maintenance and Repair Summary

Upon consideration, we find that the record does not support a finding that there is or is not sufficient capacity. We note that we may need to explore this further in a future proceeding. We do find, however, that BellSouth must do the following to achieve parity: BellSouth must provide ALECs with the technical specifications of TAFI so that ALECs can integrate their OSS with BellSouth's OSS for maintenance and repair. This electronic communication capability does not currently exist; therefore, an ALEC must manually reenter each trouble report into its own OSS system. In addition, BellSouth must provide ALECs with the ability to have all of the ALECs repair attendants logged into TAFI at the same time, just as BellSouth's repair attendants are, in order for the TAFI interface to meet the nondiscriminatory standard. The FCC concluded that "in order to meet the nondiscriminatory standard of OSS, an incumbent LEC must provide to competing carriers access to OSS functions for pre-ordering, ordering, provisioning, maintenance and repair, and billing that

is equivalent to what it provides itself, its customers or other carriers."

i. Billing

We note that we addressed billing in detail above in our discussion of UNE-related problems. We will not repeat our analysis here, but note that BellSouth has not demonstrated that it can provide billing statements for usage sensitive UNEs.

j. OSS Summary

A major area of concern with respect to the interfaces offered by BellSouth is the amount of manual intervention that is required on behalf of an ALEC service representative. The amount of manual intervention required when placing a non-complex order via the EDI interface is far in excess of how BellSouth would place the same order. The primary problem is that BellSouth does not provide a pre-ordering interface that is integrated with an ordering interface that provides these functions in essentially the same time and manner as BellSouth's internal systems. In addition, the interface must provide the capability to interconnect the ALEC's own internal OSS to BellSouth's OSS. BellSouth has not provided the technical data to requesting carriers to permit the development of such an interconnection. In the Ameritech Order, the FCC listed several components for the provision of access to OSS. These components include: 1) the interface, or gateway, which is used to inter-connect the ALEC's own internal OSS to an RBOC's OSS; 2) a processing link, either electronic or manual, between the interface and the RBOC's internal OSS which includes all necessary back office systems and personnel; 3) all internal OSS or legacy systems that an RBOC uses in providing UNEs to an ALEC.

According to the FCC, an RBOC must provide more than just an interface in order to comply with the nondiscriminatory access standard for OSS. BellSouth has only partially provided part one of the three components mentioned above. BellSouth has provided interfaces, but the interfaces do not permit interconnection to the ALEC's OSS at this time.

The FCC states that in order for an RBOC to meet the

nondiscriminatory access standard, no limits may be placed on the processing of information between the interface and the legacy systems, if such limits did not permit an ALEC to perform a function in substantially the same time and manner as the RBOC performs the function for itself.

Upon consideration, we believe that BellSouth is required to demonstrate to this Commission and to the FCC, that its interfaces provide nondiscriminatory access to OSS functions. Although AT&T witness Bradbury stated that there are five characteristics of a non-discriminatory interface, we find it appropriate to recognize four of those characteristics. We find that each interface must exhibit the following characteristics to be in compliance with the nondiscriminatory standards of the Act. They are: 1) the interface must be electronic. The interface must require no more human or manual intervention than is necessarily involved for BellSouth to perform a similar transaction itself; 2) the interface must provide the capabilities necessary to perform functions with the same level of quality, efficiency, and effectiveness as BellSouth provides to itself; 3) the interface must have adequate documentation to allow an ALEC to develop and deploy systems and processes, and to provide adequate training to its employees; and, 4) the interface must be able to meet the ordering demand of all ALECs, with response times equal to that which BellSouth provides itself.

The fifth requirement, as discussed by witness Bradbury, is that an interface must comply with national standards. Although we agree that an interface should comply with national standards, there are no national standards for pre-ordering interfaces. Therefore, BellSouth's proprietary interface, LENS, could have been sufficient to meet the integrated interface requirement, if it met all four of the requirements of a non-discriminatory interface. We find that BellSouth must offer a pre-ordering interface that is integrated with the industry-standard EDI interface, for two reasons. First, integration of pre-ordering and ordering functions must be provided simply because BellSouth has integrated its own internal pre-ordering and ordering functions; and second, BellSouth has declared that EDI is the ordering interface that it recommends carriers use.

In summary, we find that the interfaces and processes

offered by BellSouth do not permit an ALEC to perform an OSS function in substantially the same time and manner as BellSouth performs the functions for itself. In addition, the SGAT offers the same interfaces and OSS functions; therefore, the same problems identified above are applicable to what is offered via the SGAT. These deficiencies also render the SGAT non-compliant with the UNE portion of the checklist.

4. Conclusion

We find that BellSouth has not met its duty to provide nondiscriminatory access to UNEs to requesting carriers. We agree with the FCC that the BOC must demonstrate that it is meeting the nondiscriminatory access standard for UNEs, including access to OSS functions, by offering an efficient carrier a meaningful opportunity to compete. The FCC concluded in the Ameritech order that its requirement on BOCs to demonstrate nondiscriminatory access to OSS functions is "achievable." The FCC stated: "We require, simply, that the BOC provide the same access to competing carriers that it provides to itself."

Based on the evidence in this proceeding, we find that BellSouth has not met the requirements of Section 271(c)(2)(B)(ii). BellSouth has not fulfilled its duty to provide, to a requesting carrier, nondiscriminatory access to unbundled network elements, including access to its operations support systems functions as required by the Act, the FCC's rules, and our arbitration order.

C. Nondiscriminatory Access to Poles, Ducts, Conduits, and Rights-of-way in Accordance with Section 224, Pursuant to Section 271(c)(2)(B)(iii).

Section 271(c)(2)(B)(iii) of the Act in conjunction with Section 224 requires BellSouth to provide nondiscriminatory access to poles, ducts, conduits, and rights-of-way to ALECs when requested. If no requests for access have been made, then BellSouth is required to demonstrate that it is capable of providing such access if an ALEC or cable television company requests it.

BellSouth argues that it has met this checklist item.